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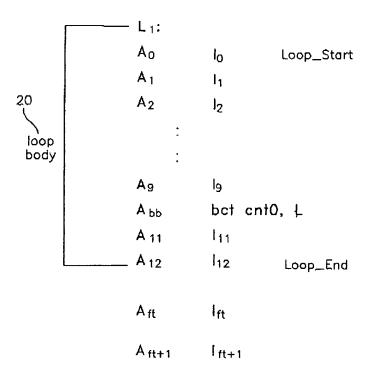


FIG.  $1\alpha$ 

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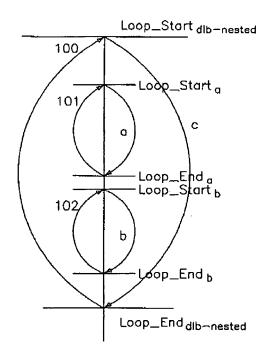
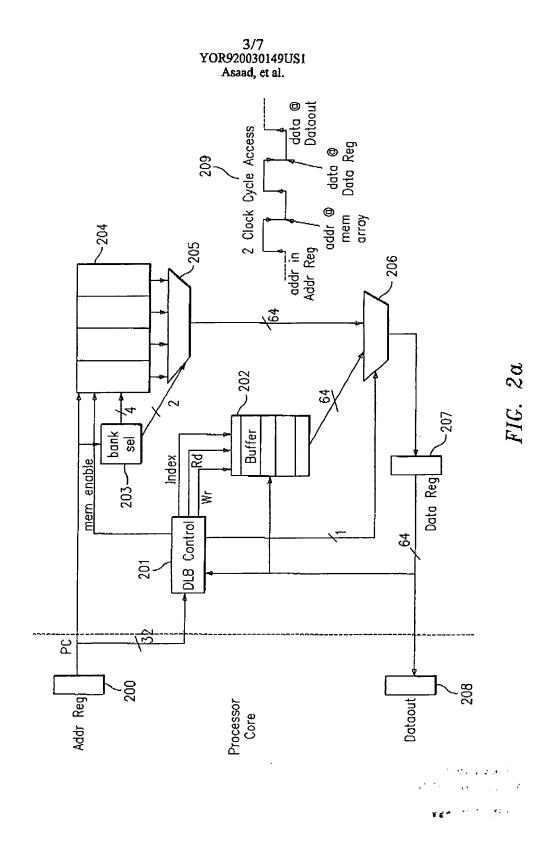
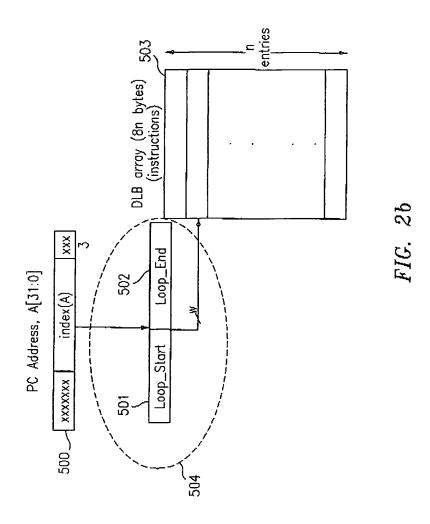


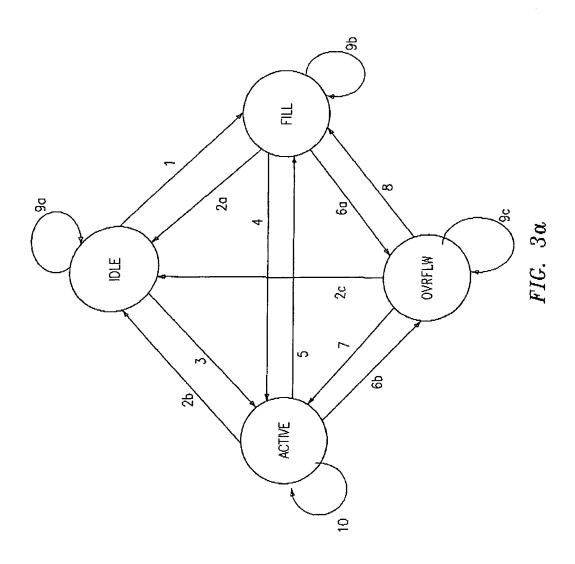
FIG. 1b



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ID	From - To	Condition
1	I–F	[(backward branch (bb) detected & taken)    (move within loop range & entry invalid)]
2a 2b 2c	F-I A-i O-I	[(bb not taken)    (another cof causes move outside loop range)]
3	I-A	(move into loop range & entry valid)
4	F-A	[(bb is taken again)    (another indented bb is taken)] & (entry valid)
5	A-F	[(resume filling rest of loop)    (move within loop range & entry invalid)]
6a 6b	F-0 A-0	(end of physical loop buffer reached)
7	0-A	[(cof caused within loop range)    (bb detected and taken ogain)] & [(next_data within buffer range) & (entry valid)]
8	0-F	[(cof caused within loop range)    (bb detected and taken again)] & [(next_data within buffer range) & (entry invalid)]
9a 9b 9c	I-I F-F 0-0	(no cof)
10	A-A	(no cof) & (entry valid)

FIG. 3b

